

Aamer Ahmed Baqai

Adjunct Faculty

College of Electrical & Mechanical Engineering

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About

Dr. Aamer Ahmed Baqai is working as Adjunct Faculty in the College of Electrical & Mechanical Engineering. Dr. Aamer Ahmed Baqai has a PhD in Mechanical / Manufacturing. Dr. Aamer Ahmed Baqai has published 36 research articles & conference papers having a citation count of 313, carried out 0 projects and filed 1 intellectual property.

Qualifications

PhD in Mechanical / Manufacturing	2006 - 2010
Paris Tech, France , France	
MSc in Mech Engineering	2005 - 2006
Paris Tech, France , France	
BE in Mech Engineering	1990 - 1993
UET Lahore , Pakistan	

Experience

Adjunct Faculty	2022- Present
College of Electrical & Mechanical Engineering	
Defence Faculty	2020 - 2022
College of Electrical & Mechanical Engineering	
Professor (Dean)	2020 - 2022
NUST College of E&ME , Peshawar Road, Rawalpindi	
Teaching Visiting Faculty	2015 - 2020
NUST College of E&ME , Peshawar Road, Rawalpindi	
Associate Professor (PG Coord & HoD DME)	2011 - 2015
NUST College of E&ME , Peshawar Road, Rawalpindi	
Assistant Professor	2010 - 2011
NUST College of E&ME , Peshawar Road, Rawalpindi	

Research Articles

Hybrid Additive Manufacturing: A Review from a Process Planning Perspective	2024
Rabiah Tabassum Uzair Khaleeq Uz Zaman Aamer Ahmed Baqai, Abdur Rehman Mazhar Sajid Ullah Butt	
Journal of Advanced Manufacturing Systems, Volume 23, No. 01, Pages 227-262	
Impact Factor: 0.900 Quartile: 4 Citations: 1	
DOI: 10.1142/S0219686724500100	
Optimization of Wire Electric Discharge Machining (WEDM) Process Parameters for AISI 1045 Medium Carbon Steel Using Taguchi Design of Experiments	2022
Uzair Khaleeq uz Zaman Usman Ahmed Khan Shahid Aziz Aamer Ahmed Baqai Sajid Ullah Butt Danish Hussain Ali Siadat Dong Won Jung	
Materials , Volume 15(21), Article Number 7846	
Impact Factor: 3.748 Quartile: 1 Citations: 13	
DOI: 10.3390/ma15217846	
Comparative analysis of tool wear progression of dry and cryogenic turning of titanium alloy Ti-6Al-4V under low, moderate and high tool wear conditions	2022
Muhammad Ali Khan Syed Hussain Imran Jaffery Aamer Ahmed Baqai Mushtaq Khan	
International Journal of Advanced Manufacturing Technology, Volume:121, Issue:1-2, Page:1269-1287	

Impact Factor: 3.226 Quartile: 2 Citations: 20 DOI: https://doi.org/10.1007/s00170-022-09196-y	
Locator Placement Optimization for Minimum Part Positioning Error During Machining Operation Using Genetic Algorithm <i>Sajid Ullah Butt Mamoon Arshad Aamer Ahmed Baqai Hasan Aftab Saeed Naveed Akmal Din Rehan Ahmed Khan</i> <i>International Journal of Precision Engineering and Manufacturing</i> , Volume 22(5), Pages 813-829 Impact Factor: 2.041 Quartile: 3 Citations: 9 DOI: https://doi.org/10.1007/s12541-021-00500-6	2021
Material Handling Cost Consideration in Process Plan Selection for Reconfigurable Manufacturing System <i>Syeda Naela Fatima Hasan Aftab Saeed Sajid Ullah Butt Aamer Baqai</i> <i>Journal of Engineering and Applied Sciences</i> , Volume 38, Issue 1, Pages 1-14 Impact Factor: 0 DOI: 10.25211/jeas.v38i1.2302	2019
Impact of fused deposition modeling (FDM) process parameters on strength of built parts using Taguchi's design of experiments <i>Emilien Boesch Ali Siadat Mickael Rivette Aamer Ahmed Baqai Uzair Khaleeq uz Zaman</i> <i>International Journal of Advanced Manufacturing Technology</i> , Volume 101, Issue 5–8, Pages 1215–1226 Impact Factor: 2.633 Quartile: 2 Citations: 150 DOI: 10.1007/s00170-018-3014-6	2019
Incorporation of part complexity into system scalability for flexible/reconfigurable systems <i>Syed Maaz Hasan Aamer Ahmed Baqai Sajid Ullah Butt Muhammad Farhan Ausaf Uzair Khaleeq uz Zaman</i> <i>The International Journal of Advanced Manufacturing Technology</i> , Volume:99, Issue:9-12, Page:2959-2979 Impact Factor: 2.496 Quartile: 2 Citations: 4 DOI: 10.1007/s00170-018-2654-x	2018
Development of a STEP-compliant design and manufacturing framework for discrete sheet metal bend parts <i>Syed Husain Imran Jaffery Zahid Faraz Syed Waheed ul Haq Liaqat Ali Wasim Akram Tarar Aamer Ahmed Baqai Mushtaq Khan Rizwan Saeed Choudhry Khalid Mahmood</i> <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , Volume 232, Issue 6, Pages 1090-1104 Impact Factor: 1.752 Quartile: 3 Citations: 5 DOI: 10.1177/0954405416661007	2018
Product family formation based on complexity for assembly systems <i>Syed Maaz Hasan Uzair Khaleeq uz Zaman Aamer Ahmed Baqai Sajid Ullah Butt</i> <i>The International Journal of Advanced Manufacturing Technology</i> , NULL Impact Factor: 2.496 Quartile: 2 Citations: 13 DOI: DOI: https://doi.org/10.1007/s00170-017-1174-4	2018
Framework for Part Families Associated with Setup Sequence Based Similarity in Reconfigurable Manufacturing System / Cellular Manufacturing System <i>Muhammad Ali Aamer Ahmed Baqai Sajid Ullah Butt Syed Maaz Hasan</i> <i>International Journal of Materials, Mechanics and Manufacturing</i> , Volume 6 Number 1, Pages 63-68 Impact Factor: N/A DOI: 10.18178/ijmmm.2018.6.1.348	2018
Optimum machine capabilities for reconfigurable manufacturing systems <i>Eram Asghar Aamer Ahmed Baqai Lazhar Homri Uzair Khaleeq uz Zaman</i> <i>The International Journal of Advanced Manufacturing Technology</i> , Pages 1–21, online published on 10 Jan 2018 Impact Factor: 2.496 Quartile: 2 Citations: 33 DOI: https://doi.org/10.1007/s00170-017-1560-y	2018
An analytical approach for positioning error and mode shape analysis of n – legged parallel manipulator <i>Muhammad Sohail Sajid Ullah Butt Aamer Ahmed Baqai</i> <i>International Journal of Computer Integrated Manufacturing</i> , NULL Impact Factor: 1.995 Quartile: 2 Citations: 5 DOI: http://dx.doi.org/10.1080/0951192X.2017.1379098	2017
Integrated product-process design to suggest appropriate manufacturing technology: a review <i>Ali Siadat Mickael Rivette Aamer Ahmed Baqai Lihong Qiao Uzair Khaleeq uz Zaman</i>	2017

Impact Factor: 2.601 | **Quartile:** 2 | **Citations:** 33

DOI: 10.1007/s00170-016-9765-z

A Novel Idea for Optimizing Condition Based Maintenance using Genetic Algorithms and Continuous Event Simulation Techniques

2017

Mansoor Ahmed Siddiqui Shahid Ikramullah Butt Aamer Ahmed Baqai Jiping Lu Faping Zhang

Mathematical Problems in Engineering, Volume 2017, Article ID 6061234

Impact Factor: 1.145 | **Quartile:** 3 | **Citations:** 11

DOI: <https://doi.org/10.1155/2017/6061234>

Sheet-metal bend sequence planning subjected to process and material variations

2017

Zahid Faraz Syed Waheed ul Haq Liaqat Ali Khalid Mahmood Wasim Akram Tarar Aamer Ahmed Baqai Mushtaq Khan Syed Husain Imran

The International Journal of Advanced Manufacturing Technology, NULL

Impact Factor: 2.601 | **Quartile:** 2 | **Citations:** 11

DOI: 10.1007/s00170-016-8823-x

Co-development of process planning and structural configurations considering machine's accessibility in a reconfigurable setup

2016

Eram Asghar Aamer Ahmed Baqai Ramshah Ahmad Toor Sara Ayub

Review of Computer Engineering Research, Volume 3, No. 2, Pages 41-46

Impact Factor: 0

DOI: 10.18488/journal.76/2016.3.2/76.2.41.46

Reconfigurable fixture locating layout for compliant sheet metal welded assemblies subjected to welding force variations

2014

Aamer Ahmed Baqai Zahid Faraz Syed Waheed ul Haq Waseem Akram Tarar Liaqat Ali

Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, Volume 228(5), Pages 740-750

Impact Factor: 0.954 | **Quartile:** 3 | **Citations:** 3

DOI: 10.1177/0954405413506704

Effect of surface roughness and temperature on EHL for parallel surfaces subjected to high acceleration

2014

Usman Ali Zia Aamer Ahmed Baqai Waseem Akram

Tribology in Industry, Volume 36, Issue 2, Pages 144-154

Impact Factor: -

DOI: -xyz

Conference Proceedings

Specific cutting energy analysis of turning Ti-6Al-4V under dry, wet and cryogenic conditions

2022

Muhammad Ali Khan Syed Hussain Imran Jaffery Aamer Ahmed Baqai Mushtaq Khan

11th International Conference on Through-life Engineering Services – TESConf2022, res.country(231,)

Citations: N/A

DOI: <https://dspace.lib.cranfield.ac.uk/handle/1826/18659>

Integrated Product-Process Design: Conceptual Framework for Data Driven Manufacturing Resource Selection

2022

Uzair Khaleeq uz Zaman Mujtaba Rafique Ghoto Ali Siadat Aamer Ahmed Baqai Anas Bin Aqeel Usman Qamar

2022 2nd International Conference on Digital Futures and Transformative Technologies (IcoDT2), res.country(177,)

Citations: N/A

DOI: 10.1109/ICoDT255437.2022.9787394

A petri-net model for scalable systems with variable stages based on changing product demands

2018

Syed Maaz Hasan Sajid Ullah Butt Aamer Ahmed Baqai

28th International Conference on Flexible Automation and Intelligent Manufacturing (FAIM 2018), res.country(233,)

Citations: N/A

DOI: 10.1016/j.promfg.2018.10.036

Accuracy Analysis of 3-RSS Delta Parallel Manipulator

2018

Mansoor Ghazi Sajid Ullah Butt Aamer Ahmed Baqai Qasim Nazir

28th International Conference on Flexible Automation and Intelligent Manufacturing, res.country(233,)

Citations: N/A

DOI: 10.1016/j.promfg.2018.10.033

A new approach to predict the flexibility and precision of manufacturing systems using geometric constraints and small displacement torsors <i>Hana Amin Khan Sajid Ullah Butt Aamer Ahmed Baqai Hasan Aftab Saeed</i> <i>28th International Conference on Flexible Automation and Intelligent Manufacturing (FAIM 2018), res.country(233,)</i> Citations: N/A DOI: 10.1016/j.promfg.2018.10.049	2018
Integrated Design-Oriented Framework for Resource Selection in Additive Manufacturing <i>Uzair Khaleeq Uz Zaman Mickael Rivette Aamer Ahmed Baqai</i> <i>28th CIRP Design Conference, res.country(75,)</i> Citations: N/A DOI: 10.1016/j.procir.2018.02.039	2018
Optimization of Locators Placement for Minimum Workpiece Positioning Error <i>Mamoon Arshad Sajid Ullah Butt Aamer Ahmed Baqai</i> <i>International Conference on Intelligent Systems, Metaheuristics & Swarm Intelligence (ISMSI 2017), res.country(94,)</i> Citations: N/A DOI: 10.1145/3059336.3059357	2017
Multiobjective optimization of a Tricept parallel manipulator using Evolutionary Algorithms <i>Syed Saad Farooq Aamer Ahmed Baqai Sajid ullah Butt Wasim Akram Tarar Amjad Baig</i> <i>25th International Conference of Flexible Automation and Intelligent Manufacturing, res.country(231,)</i> Citations: N/A DOI: https://www.researchgate.net/publication/305703482_Multi_objective_Optimization_of_a_Tricept_Parallel_Manipulator_using_Evolutionary_Algorithm	2015
Performance of NSGA-II and WGA in Macro Level Process Planning Considering Reconfigurable Manufacturing System <i>Eram Asghar Aamer Ahmed Baqai Uzair Khaleeq uz Zaman</i> <i>International Conference on Flexible Automation and Intelligent Manufacturing, res.country(231,)</i> Citations: N/A DOI: N/A	2015
Global Sequence Generation and Minimizing the Total Utility Work for Mixed Model Assembly Lines <i>Amjad Baig Aamer Ahmed Baqai Uzair Khaleeq uz Zaman</i> <i>25th International Conference on Flexible Automation and Intelligent Manufacturing FAIM 2015, res.country(231,)</i> Citations: N/A DOI: https://www.researchgate.net/publication/320183172_Global_Sequence_Generation_and_Minimizing_the_Total_Utility_Work_for_Mixed_Model_Assembly_Lines	2015
Mixed Model Assembly Line sequencing by Minimizing Utility Work and Using Genetic Algorithm <i>Uzair Khaleeq uz Zaman Aamer Ahmed Baqai</i> <i>ASME 2014 International Mechanical Engineering Congress and Exposition IMECE2014, res.country(38,)</i> Citations: N/A DOI: 10.1115/IMECE2014-38000	2014
Vehicle Modeling and Performance Evaluation Using Active Torque Distribution <i>Rizwan Latif Raja Amer Azim Aamer Ahmed Baqai Imran Shafi</i> <i>SAE 2014 World Congress and Exhibition, res.country(233,)</i> Citations: N/A DOI: 10.4271/2014-01-0103	2014
Multi-Criteria Optimization of Process Plans for Reconfigurable Manufacturing Systems: An Evolutionary Approach <i>Taiba Zahid Aamer Ahmed Baqai</i> <i>ASME 2013 International Mechanical Engineering Congress and Exposition, res.country(233,)</i> Citations: N/A DOI: 10.1115/IMECE2013-64560	2013
An approach for the selection of process plans based on part family changes <i>Syed Maaz Hasan Aamer Ahmed Baqai</i> <i>FAIM Flexible Automation and Intelligent Manufacturing Proceedings Published in Advances in Sustainable and Competitive Manufacturing Systems, res.country(183,)</i> Citations: N/A DOI: https://doi.org/10.1007/978-3-319-00557-7	2013

A Petri-Net Model for Machine Structure Configuration Approach

2012

Syed Maaz Hasan Aamer Ahmed Baqai Muhammad Nadeem Azam

ASME 2012 International Mechanical Engineering Congress and Exposition, res.country(233,)

Citations: N/A

DOI: <https://doi.org/10.1115/IMECE2012-88846>

An algorithm for the generation/selection of process plans based upon production rate

2011

Syed Maaz Hasan Muhammad Nadeem Azam Muhammad Salman Siddiqui Aamer Ahmed Baqai

International Conference on Advance Modeling and Simulation At: NUST, Islamabad Pakistan , res.country(177,)

Citations: N/A

DOI: Nil

Book Chapters

Computer-Aided Design, Computer-Aided Process Planning, and Computer-Aided Manufacturing

2023

Anas Bin Aqeel Uzair Khaleeq uz Zaman Shahid Aziz Aamer Ahmed Baqai

In: *Handbook of Manufacturing Systems and Design: An Industry 4.0 Perspective* , Chapter 2, 1st Edition, Pages:20

Citations: 2

DOI: 10.1201/9781003327523-3

Editorial Activities

Edited Journal Issue / Proceeding / Book

2023

Impact Factor: -

Intellectual Property

Copyrights

Patents

Industrial Designs

Flexible Mobile Automated Guided Vehicle Platform

2021

Status: Filed

Trademarks